Amendment of Claims

Please amend the claims as indicated in the following listing of claims. This listing of claims will replace all prior versions and listings of claims in the present application.

Listing of Claims

- 1. (Currently Amended) A computer system for performing grid computing with a plurality of computers connected through a network, the computer system comprising:
- a center server for requesting the <u>plurality of computers</u> on the network to execute a job; and
- a process server, which is one of the plurality of computers, for executing athe job in response to a request from the center server;

wherein the center server comprises:

a scheduler section which assigns athe job to be executed to the process server and issues a job execution request; and

an agent section which manages information about the process server, receives the <u>job</u> <u>execution</u> request issued by the scheduler section, and sends the <u>job execution</u> request to the process server to which the requested job has been assigned, <u>depending on the statusin a manner selected to accommodate an access type</u> of the process server.

- 2. (Currently Amended) The computer system according to claim 1, wherein the agent section is provided for the system comprises a plurality of process servers, and each of athe plurality of process servers is provided with a separate agent section.
- 3. (Currently Amended) The computer system according to claim 21, wherein the agent section obtains information about the capacity and operating status of the process server corresponding to the agent section from the process server and manages the information, and the scheduler section assigns the job to the process server on the basis of the information managed by the agent section.
- 4. (Currently Amended) The computer system according to claim 12, wherein the scheduler section issues at least two job execution requests assigned to different process servers, and at least one the agent sections sends thea first job execution request received from the scheduler section to at least some of the corresponding process servers erver in response to polling accesses access from the corresponding process servers erver, and theat least one second agent sections sends thea second job execution request received from the scheduler section to at least some of the other corresponding process servers erver in a push type scheduling scheme at timing managed by the second agent sections.
- 5. (Currently Amended) The computer system according to claim 12, wherein at least some of the process servers are connected to the center server through a firewall; and the agent sections corresponding to said process servers send the request received from the

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scheduler section to the process servers connected through the fire wall in response to polling accesses from the process servers.

6. (Currently Amended) A server for scheduling jobs and requesting execution of the jobs in a grid computing system, the server comprising:

a processor; and

a memory operably connected to the processor, and having encoded thereon instructions executable by the processor, comprising;

a scheduler section which assigns a job of the jobs to be executed to a computer constituting the grid computing system and requests the computer to execute the job; and an agent section which manages information about the computer, receives the request for execution of the job by the scheduler section on behalf of the computer to which the job has been assigned, and provides a request for execution of the job to the computer, depending on the status in a manner selected to accommodate an access type of the computer.

- 7. (Currently Amended) The server according to claim 6, wherein the agent section is provided for each of computers constituting the <u>grid computing</u> system and makes <u>athe</u> request for execution of the job by using an individual communication scheme established between the agent section and a corresponding computer.
- 8. (Currently Amended) The server according to claim 7, wherein a separate agent section is provided for each of the computers, the scheduler section issues at least at least one job execution request to each of at least two different computers, and at least some first one of the agent sections provide a request for execution of the corresponding job to a first one of the computers constituting the system in response to polling accesses from the first one of the computers, and at least some a second one of the other agent sections provide a request for execution of the corresponding job to a second one of the computers in a push scheduling scheme at timing managed by the agent sections.
- 9. (Currently Amended) A server for scheduling jobs and requesting execution of the jobs in a grid computing system, the server comprising:

a processor; and

a memory operably connected to the processor, and having encoded thereon instructions executable by the processor, comprising:

an agent section which manages information about the capacity and operating status of a computer constituting the <u>grid computing</u> system, relays communication with the computer, and performs transmission and reception according to the operating status an access type of the computer; and

a scheduler section which assigns, on the basis of the information managed by the agent section, a job of the jobs to be executed by the computer, and requests the computer to which the job has been assigned to execute the job through the agent section.

10. (Currently Amended) The server according to claim 9, wherein the agent section

is<u>separate agent sections are</u> provided for each of computers constituting the <u>grid computing</u> system, and the scheduler section requests execution of <u>athe</u> job through <u>anthe</u> agent section corresponding to <u>athe</u> computer to which the job has been assigned.

- 11. (Currently Amended) The server according to claim 9, wherein the scheduler section assigns the job on the basis of information about the capacity of the computer stored in the agent section and makes athe request for execution of the job regardless of the operating statusan access type of the computer to which the job has been assigned, and the agent section sends a request for execution of athe job issued by the scheduler section to at least somea first one of the computers in response to polling accesses from the computers, and sends a request for execution of athe job issued by the scheduler section to at least somea second one of the other computers in a push scheduling scheme at timing managed by the agent section.
- 12. (Currently Amended) A job execution control method using a computer to schedule jobs and request execution of the jobs in a grid computing system, comprising the steps of:

the computer assigning a job on the basis of the capacity of a process server constituting the <u>grid computing</u> system, stored in a storage, and executing a job <u>of the jobs</u>, regardless of the operating status of the process server;

the computer issuing a job execution request to the process server to which the job has been assigned; and

the computer holding temporarily the issued job execution request and sending the job execution request to the process server to which the job has been assigned, depending onaccording to the operating status access type of the process server.

13. (Currently Amended) A <u>computer program product, comprising a computer readable non-transitory storage medium having encoded thereon:</u> for causing a computer to implement the functions of:

<u>computer instructions for storing in recording means and managing information about a</u> process server which constitutes a grid computing system and executes a job;

computer instructions for assigning athe job to be executed to the process server on the basis of information about the process server and issuing a job execution request; and

<u>computer instructions for receiving the issuedjob execution</u> request and sending the request to the process server to which the requested job has been assigned, depending on the operating status in a manner selected to accommodate an access type of the process server.

- 14. (Currently Amended) The <u>compuer program product</u> according to claim 13, wherein the <u>function of issuing a job execution request causes the computer to assign the jobcomputer instructions for sending a request to the process server send the request regardless of the operating status of the process server.</u>
- 15. (Currently Amended) The <u>computer program product</u> according to claim 13, wherein the <u>function of computer instructions for sending the request to the process server causescause computer to send the request to at least <u>some</u> a <u>first one of a plurality</u> of process servers in</u>

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response to polling accesses from the process servers, and send the request to at least <u>somea</u> <u>second one of a plurality</u> of <u>the other-process</u> servers at timing managed by the computer.

16. (Currently Amended) The <u>computer program product</u> according to claim 13, wherein the <u>function of computer instructions for</u> sending the request to the process server <u>causescause</u> the computer to send the request received from a scheduler section to the process server connected to the computer through a firewall in response to a polling access from the process server.